<110> Cochran, Andrea G.
Skelton, Nicholas J.
Starovasnik, Melissa A.

<120> Structured Peptide Scaffold For Displaying Turn Libraries On Phage

<130> P1762R1 US

<140> US 09/592,695
<141> 2000-06-13

<150> US 60/139,017
<151> 1999-06-14

<160> 40

<210> 1
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 2, 9
<223> Xaa at positions 2 or 9 is Trp, Tyr, Phe, His, Ile, Val or Thr.

<220>
<221> UNSURE
<222> 3, 8
<223> Xaa at positions 3 or 8 is Trp, Tyr, Phe, Leu, Met, Ile or Val.

<400> 1
Cys Xaa Xaa Glu Gly Asn Lys Xaa Xaa Cys
1 5 10

<210> 2
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 2
Cys Thr Trp Glu Gly Asn Lys Leu Thr Cys
1 5 10

<210> 3
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 3
Ser Cys Thr Trp Glu Gly Asn Lys Leu Thr Cys Lys
1 5 10

<210> 4
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 4
Cys Gly Asn Gln Gly Ser Phe Leu Thr Cys
1 5 10

<210> 5
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 5
Cys Thr Trp Gln Gly Ser Phe Leu Thr Cys
1 5 10

<210> 6
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 6
Ser Cys Gly Asn Gln Gly Ser Phe Leu Thr Cys Lys
1 5 10

<210> 7
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 7
Ser Cys Thr Asn Gln Gly Ser Phe Leu Thr Cys Lys
1 5 10

<210> 8
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 8
Ser Cys Gly Trp Gln Gly Ser Phe Leu Thr Cys Lys
1 5 10

<210> 9
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 9
Ser Cys Thr Trp Gln Gly Ser Phe Leu Thr Cys Lys
1 5 10

<210> 10
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 10
Met Gln Ile Gly Val Lys Asn Pro Asp Gly Thr Ile Thr Leu Glu
1 5 10 15

Val

<210> 11
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 8
<223> Xaa at position 8 is Pro

<220>
<221> UNSURE
<222> 9
<223> Xaa at position 9 is Ala or Gly

<400> 11
Met Gln Ile Gly Val Lys Ser Xaa Xaa Lys Thr Ile Thr Leu Lys
1 5 10 15

Val

<210> 12
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 12
Cys Thr Lys Val Trp Gln Leu Trp Thr Cys
1 5 10

<210> 13
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 13
Ser Cys Thr Trp Val Trp Gln Leu Leu Thr Cys Lys
1 5 10

<210> 14
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 14
Ser Cys His Phe Gly Pro Leu Thr Trp Val Cys Lys
1 5 10

<210> 15
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 15
Ser Cys Thr Trp Gly Pro Leu Thr Leu Thr Cys Lys
1 5 10

<210> 16
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.

<400> 16
Cys Thr Xaa Glu Gly Asn Lys Leu Thr Cys
1 5 10

<210> 17
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE

<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.

<400> 17
Cys Thr Xaa Glu Asn Gly Lys Leu Thr Cys
1 5 10

<210> 18
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.

<220>
<221> UNSURE
<222> 5
<223> Pro is D-Pro

<400> 18
Cys Thr Xaa Glu Pro Asn Lys Leu Thr Cys
1 5 10

<210> 19
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.

<220>
<221> UNSURE
<222> 5
<223> Pro is D-Pro

<400> 19
Cys Thr Xaa Glu Pro Gly Lys Leu Thr Cys
1 5 10

<210> 20
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 3
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala

<400> 20
Cys Thr Xaa Glu Gly Asn Lys Leu Thr Cys
1 5 10

<210> 21
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 8
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.

<400> 21
Cys Thr Leu Glu Gly Asn Lys Xaa Thr Cys
1 5 10

<210> 22
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 3
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala

<400> 22
Cys Thr Xaa Glu Gly Asn Lys Trp Thr Cys
1 5 10

<210> 23
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 8
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala

<400> 23
Cys Thr Trp Glu Gly Asn Lys Xaa Thr Cys
1 5 10

<210> 24
<211> 102
<212> DNA
<213> Artificial Sequence

<220>
<223> synthesized sequence

<400> 24
taataataaa tggctgatcc gaaccgtttc cgcggtaaag atctgggtgg 50

cggtactcca aacgacccgc caaccactcc accaactgat agcccaggcg 100

gt 102

<210> 25
<211> 72
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthesized sequence.

<220>
<221> unsure
<222> 19-20, 31-32, 34-35, 37-38, 40-41, 52-53
<223> unknown base

<400> 25
tccgcctcgg cttatgcann stgcacttgg nnsnnsnnsn nsctgacttg 50

tnnsatggct gatccgaacc gt 72

<210> 26
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 26
Tyr Gln Asn Pro Asp Gly Ser Gln Ala
1 5

<210> 27
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 27
Ile Tyr Ser Asn Pro Asp Gly Thr Trp Thr
1 5 10

<210> 28
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 28
Ile Tyr Ser Asn Ser Asp Gly Thr Trp Thr
1 5 10

<210> 29
<211> 10

<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 29
Ile Thr Ser Asn Ser Asp Gly Thr Trp Thr
1 5 10

<210> 30
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 30
Tyr Ile Thr Asn Ser Asp Gly Thr Trp Thr
1 5 10

<210> 31
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 31
Arg Gly Ile Thr Val Asn Gly Lys Thr Tyr Gly Arg
1 5 10

<210> 32
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 6
<223> Xaa at position 6 is D-Pro or L-Asn

<220>
<221> UNSURE
<222> 8
<223> Xaa at position 8 is Orn

<400> 32
Arg Tyr Val Glu Val Xaa Gly Xaa Lys Ile Leu Gln
1 5 10

<210> 33
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 33
Lys Lys Tyr Thr Val Ser Ile Asn Gly Lys Lys Ile Thr Val Ser
1 5 10 15

Ile

<210> 34
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 34
Gly Glu Trp Thr Tyr Asp Asp Ala Thr Lys Thr Phe Thr Val Thr
1 5 10 15

Glu

<210> 35
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 35
Ala Cys Ser Pro Gly His Cys Glu
1 5

<210> 36
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 36
Cys Gly Val Ser Arg Gln Gly Lys Pro Tyr Cys
1 5 10

<210> 37
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 37
Gly Cys Lys Pro Thr Phe Arg Arg Leu Lys Trp Lys Tyr Lys Cys
1 5 10 15

Gly

<210> 38
<211> 18

<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 38
Cys Ala Gly Phe Met Arg Ile Arg Gly Arg Ile His Pro Leu Cys
1 5 10 15

Met Arg Arg

<210> 39
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 39
Phe Cys Asn Gln Gly Ser Phe Leu Cys Tyr
1 5 10

<210> 40
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 40
Phe Cys Tyr Ile Cys Glu Val Glu Asp Gln Cys Tyr
1 5 10